

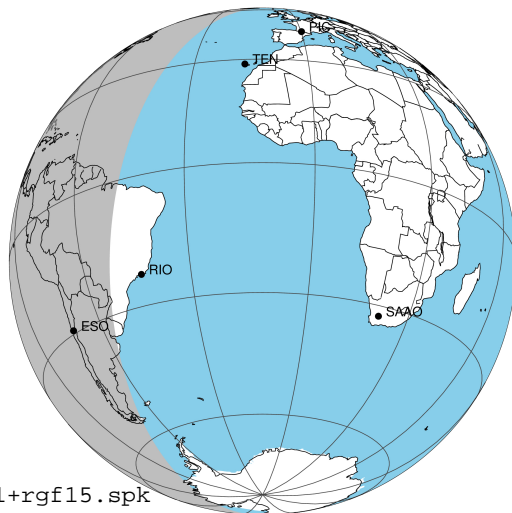
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-02-08T09:19:36.320
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4116880845150507648
 2Mass ID (if available) : 17424789-2254535

Jupiter 2043-02-08T09:19:36 K8.37 G14.13 Pgt

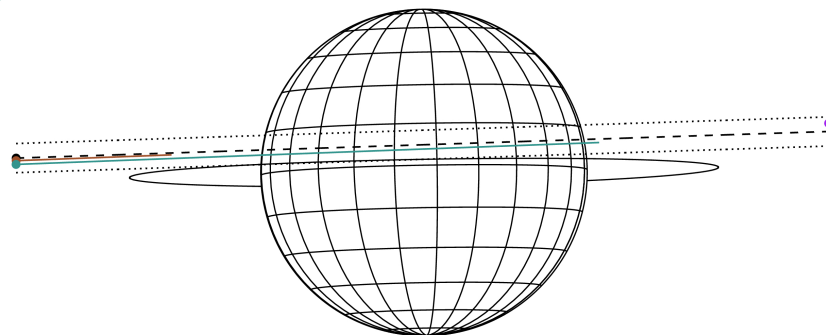
ICRS Star Coord at Epoch: 17h 42m 47.88989s -22:54:53.98598s

RUWE (>1.4 is poor) : 0.68
 K magnitude : 8.373
 G magnitude : 14.125
 RP magnitude : 12.670
 BP magnitude : 16.649
 DUPflag : 0
 Distance (au) : 5.847
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 31.20
 Sun-Target sep (deg) : 52.86
 Sun-Moon sep (deg) : 34.36
 B (ring opening deg) : -2.57
 PA of pole (deg) : 1.02
 Pole direction: RA (deg): 268.05661
 Dec (deg): 64.49732
 C/A sky separation (") : 2.867
 C/A sky separation (km) : 12158.7
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-02-08T09:19:36 K8.37 G14.13
 Pgt



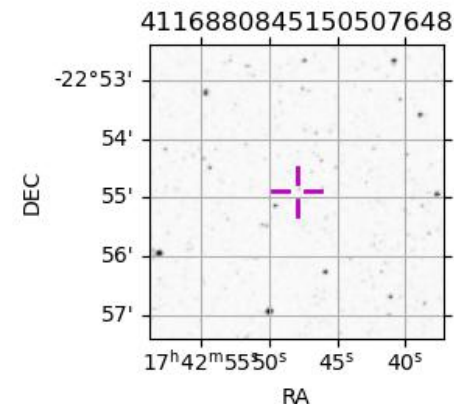
Earth
 MCD
 RIO
 ESO



2043-02-08T09:19:36.3200 cc: 17 42 47.88989 s: -22 54 53.986 C/A 2.867 PA 181.88 deg v_sky +31.20 km/s D 05.85 AU
 Credit: Styled after SORA/Lucky Star

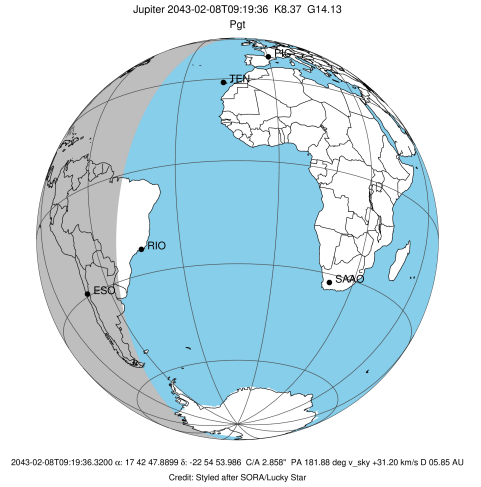
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OCode
PIC	Pic du Midi	42.9	0.1			Pnn
PAL	Palomar Mt (200")	33.4	243.1			Pnn
PMO	Purple Mtn Obs. Nanking	32.1	118.8			Pnn
KPNO	Kitt Peak Natl Obs	32.0	248.4			Pnn
MCD	McDonald Obs. 2.7m	30.7	256.0			Pnn
TEN	Teide Obs./Tenerife	28.3	343.5			Pnn
IRTF	Mauna Kea/IRTF	19.8	204.5			Pnn
KAV	Kavalur Observatory	12.6	78.8			Pnn
RIO	Rio de Janeiro	-22.9	316.8			Pnn
ESO	European Southern Obs. (3.6m)	-29.3	289.3	+ +	FEB 08 08:39 - FEB 08 09:55	Pie
AAT	Siding Spring (AAT)	-31.3	149.1			Pnn
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn

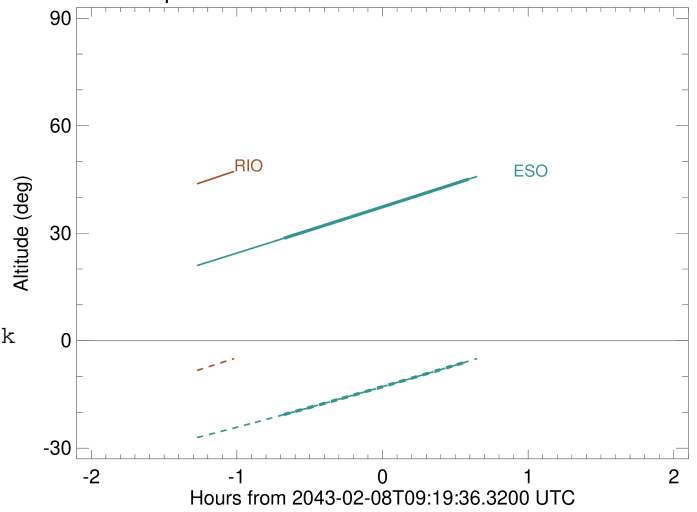


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-08T09:17:02.720
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : ESO
Location              : European Southern Obs. (3.6m)
Latitude (deg)       : -29.26097
E. Longitude (deg)   : 289.26831
Altitude (km)        : 2.400
Gaia source ID       : 4116880845150507648
2Mass ID (if available) : 17424789-2254535
ICRS Star Coord at Epoch: 17h 42m 47.88989s -22:54:53.98598s
RUWE (>1.4 is poor) : 0.68
K magnitude           : 8.373
G magnitude           : 14.125
RP magnitude          : 12.670
BP magnitude          : 16.649
DUPflag              : 0
Distance (au)        : 5.847
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 31.20
Sun-Target sep (deg) : 52.86
Sun-Moon sep (deg)   : 35.23
B (ring opening deg) : -2.57
PA of pole (deg)     : 1.02
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 2.422
C/A sky separation (km) : 10273.3
NAIF SPICE kernels   : RAJobs_U111+rgf15.spk
URKALLv1.spk
naif0012.tls
nep097.bsp
nep101.bsp
sat4401.bsp
de440.bsp
earth_720101_070426.bpc
jup365.bsp
urall6.bsp
IAU_SATURN_for_RINGFIT.tpc
pck00010.tpc
earth_200101_990628_predict.bpc
uranus_ringframes_rfrench20220627_v1.tf
neptune_ringframes_rfrench20220702a_v1.tf
earth_flat_IAU.spk
    
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Jupiter 2043-02-08T09:19:36 K8.37 G14.13



x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-08T08:39:02.751	28.60	-20.62	71491.9	7.12	8.13
Jupiter	E	2043-02-08T09:55:07.826	45.08	-5.71	71491.8	9.36	10.68